

Scaled data based on original data using
LM-79-2019 Approved Method: Electrical and Photometric Measurements of Solid-
State Lighting Products

Test Report Prepared for
Cooper Lighting Solutions

Brand: NEO-RAY

Report Number: P1011362

Luminaire Tested: S123DIP-B1165D365UB40-4F0-XX-W2A-F1

Issue Date: 5/6/2025

Test Information

Test Method: LM-79-2019
Report Number: P1011362
REPORT IS A COMBINATION OF REPORTS P989488 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/6/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S123DIP-B1165D365UB40-4F0-XX-W2A-F1
Description: Define 3 Direct/Indirect Pendant with 4000K BioUP LEDs {m-DER=0.865} {m-EER=0.951}
Light Source: -
Ballast/Driver: -

Summary

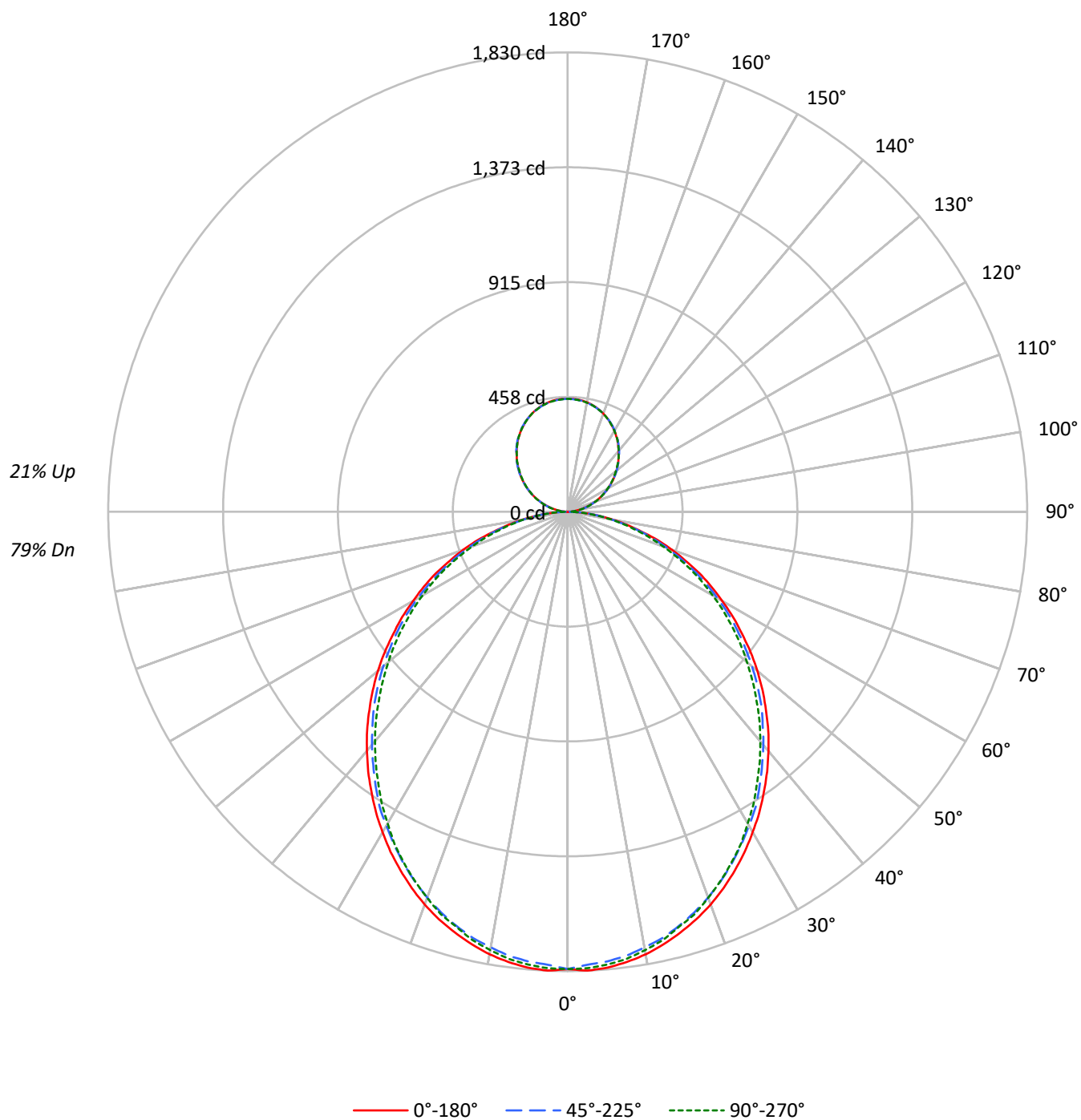
Lumens per Lamp: N/A
Luminaire Lumens: 5989.0 lumens
Efficiency: N/A
Efficacy: 84.8 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.18 / 1.3
Luminous Opening: Rectangular w/ Sides (W: 0.25' x L: 4' x H: 0.1')
CIE Type: Semi-Direct

Input Watts (W): 70.6
Input Voltage (V):
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT

TEST NUMBER: P1011362

CATALOG NUMBER: S123DIP-B1165D365UB40-4F0-XX-W2A-F1

Luminous Intensity Polar Plot



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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20				20				20				20				20
RC	80				70				50				30				10
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10
RCR																	
0	114	114	114	114	109	109	109	109	100	100	100	91	91	91	83	83	83
1	104	100	96	92	99	95	92	88	87	85	82	80	78	76	73	72	70
2	95	87	81	75	90	83	78	73	77	72	68	70	66	63	64	61	59
3	87	77	69	63	82	73	66	61	68	62	57	62	57	53	57	53	50
4	79	68	60	53	75	65	58	52	60	54	49	55	50	46	51	47	43
5	73	61	52	46	69	58	50	45	54	47	42	50	44	40	46	41	38
6	67	55	46	40	64	53	45	39	49	42	37	45	39	35	42	37	33
7	62	49	41	35	59	48	40	34	44	38	33	41	35	31	38	33	29
8	58	45	37	31	55	44	36	31	41	34	29	38	32	28	35	30	26
9	54	41	33	28	52	40	33	28	37	31	26	35	29	25	32	28	24
10	51	38	30	25	49	37	30	25	34	28	24	32	27	23	30	25	22

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	19609	19609	19609
5°	19657	18932	18903
10°	19482	18290	18103
15°	19211	17624	17231
20°	18900	16885	16366
25°	18500	16105	15444
30°	18059	15296	14471
35°	17598	14471	13506
40°	17117	13605	12557
45°	16586	12761	11565
50°	16047	11819	10569
55°	15354	10839	9560
60°	14642	9758	8486
65°	13972	8588	7366
70°	13008	7290	6059
75°	11617	5773	4703
80°	10033	4057	3326
85°	7828	2180	1667

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 16586 cd/sqm

TEST NUMBER: P1011362

CATALOG NUMBER: S123DIP-B1165D365UB40-4F0-XX-W2A-F1

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	171.7	2.9
10°-20°	484.9	8.1
20°-30°	716.2	12.0
30°-40°	836.4	14.0
40°-50°	840.9	14.0
50°-60°	738.7	12.3
60°-70°	550.1	9.2
70°-80°	313.1	5.2
80°-90°	90.0	1.5
90°-100°	29.0	0.5
100°-110°	87.7	1.5
110°-120°	149.3	2.5
120°-130°	196.4	3.3
130°-140°	220.7	3.7
140°-150°	217.0	3.6
150°-160°	182.7	3.1
160°-170°	121.6	2.0
170°-180°	42.6	0.7
0°-30°	1372.8	22.9
0°-40°	2209.3	36.9
0°-60°	3788.8	63.3
0°-90°	4742.0	79.2
90°-120°	265.9	4.4
90°-150°	900.1	15.0
90°-180°	1247.0	20.8
0°-180°	5989.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1822	1822	1822	1822	1822	
5°	1823	1815	1798	1814	1811	173
15°	1736	1729	1709	1721	1712	489
25°	1576	1566	1546	1548	1543	726
35°	1363	1353	1333	1324	1316	853
45°	1117	1110	1090	1071	1064	862
55°	847	846	826	808	800	759
65°	578	570	554	542	537	570
75°	305	299	294	287	282	326
85°	82	78	78	75	75	87
90°	0	4	8	10	11	7
95°	21	23	26	28	28	23
105°	80	80	83	83	84	85
115°	150	151	151	151	151	149
125°	220	221	220	219	217	196
135°	285	287	287	286	285	220
145°	346	347	348	348	346	216
155°	396	396	397	398	396	182
165°	432	431	431	433	430	122
175°	449	448	448	450	447	43
180°	450	450	450	450	450	

TEST NUMBER: P1011362

CATALOG NUMBER: S123DIP-B1165D365UB40-4F0-XX-W2A-F1

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1821.7	1821.7	1821.7	1821.7	1821.7
2.5°	1829.5	1823.2	1806.0	1821.7	1820.1
5°	1823.2	1815.4	1798.2	1813.8	1810.7
7.5°	1809.1	1801.3	1784.1	1798.2	1796.6
10°	1790.3	1782.5	1762.1	1776.2	1773.1
12.5°	1765.3	1759.0	1740.2	1749.6	1748.1
15°	1735.5	1729.3	1708.9	1721.4	1712.0
17.5°	1702.6	1694.8	1674.4	1683.8	1680.7
20°	1665.0	1655.6	1635.3	1641.5	1636.8
22.5°	1622.7	1613.3	1593.0	1597.7	1591.4
25°	1575.8	1566.4	1546.0	1547.6	1542.9
27.5°	1527.2	1517.8	1495.9	1497.4	1492.7
30°	1473.9	1466.1	1444.2	1444.2	1433.2
32.5°	1420.7	1409.7	1394.1	1383.1	1378.4
35°	1362.7	1353.3	1333.0	1323.6	1315.7
37.5°	1304.8	1292.2	1271.9	1260.9	1256.2
40°	1243.7	1234.3	1212.4	1199.8	1193.6
42.5°	1182.6	1171.6	1149.7	1137.2	1130.9
45°	1116.8	1110.5	1090.2	1071.4	1063.6
47.5°	1052.6	1043.2	1024.4	1005.6	999.3
50°	986.8	979.0	958.6	941.4	932.0
52.5°	917.9	913.2	891.3	877.2	867.8
55°	847.4	845.8	825.5	808.2	800.4
57.5°	781.6	775.3	759.7	744.0	734.6
60°	709.6	708.0	689.2	675.1	667.3
62.5°	645.3	640.6	621.8	607.7	603.0
65°	578.0	570.2	554.5	542.0	537.3
67.5°	505.9	499.7	487.1	476.2	469.9
70°	441.7	432.3	422.9	412.0	404.1
72.5°	374.4	368.1	357.1	347.7	344.6
75°	305.4	299.2	294.5	286.6	281.9
77.5°	244.4	241.2	235.0	228.7	228.7
80°	184.8	180.1	177.0	175.4	175.4
82.5°	126.9	126.9	126.9	123.7	122.2
85°	81.5	78.3	78.3	75.2	75.2
87.5°	40.7	36.0	34.5	32.9	32.9
90°	0.4	3.9	8.5	9.9	10.6
92.5°	10.6	12.7	14.8	15.9	15.2
95°	20.9	23.3	26.2	27.6	27.6
97.5°	34.3	36.1	38.2	40.0	39.6
100°	48.1	50.2	52.0	53.0	53.7
102.5°	64.0	65.1	67.5	68.6	68.2
105°	79.5	80.3	83.4	83.4	84.1
107.5°	97.9	98.3	99.7	100.8	100.4
110°	114.9	115.6	116.3	117.7	117.0

TEST NUMBER: P1011362

CATALOG NUMBER: S123DIP-B1165D365UB40-4F0-XX-W2A-F1

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	132.6	132.9	132.9	134.7	134.7
115°	150.3	151.3	150.6	151.0	150.6
117.5°	168.3	168.6	167.9	167.9	166.9
120°	184.9	187.0	185.3	184.9	184.2
122.5°	202.2	203.6	202.9	201.9	200.8
125°	219.9	221.0	220.3	218.8	217.4
127.5°	236.2	238.3	237.6	235.5	234.0
130°	252.4	255.3	254.2	252.8	250.3
132.5°	268.7	271.5	270.8	269.0	267.3
135°	285.3	287.4	287.1	285.7	285.0
137.5°	300.5	302.3	303.3	301.6	300.5
140°	316.4	318.2	318.5	318.2	315.7
142.5°	330.9	332.7	333.4	333.0	331.3
145°	346.1	346.8	347.9	347.5	346.1
147.5°	359.2	360.6	361.7	361.7	359.6
150°	373.0	373.7	374.4	374.4	372.3
152.5°	384.3	385.4	385.7	386.4	384.7
155°	396.3	396.3	396.7	398.1	395.6
157.5°	406.6	406.2	406.6	408.0	405.9
160°	416.1	415.4	415.4	417.2	415.8
162.5°	424.6	423.5	423.9	425.7	423.2
165°	431.7	430.6	430.6	432.7	430.3
167.5°	437.7	436.3	436.6	438.8	436.6
170°	442.6	441.2	441.2	443.7	441.2
172.5°	446.5	445.1	445.1	447.2	444.8
175°	449.0	447.6	447.6	449.7	447.2
177.5°	450.4	449.0	449.0	451.1	448.7
180°	450.1	450.1	450.1	450.1	450.1

(END OF REPORT)